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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,053	01/15/2004	Richard Reynolds	830_011	5101

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EXAMINER	
WEST, JEFFREY R	
ART UNIT	PAPER NUMBER
2857	
MAIL DATE	DELIVERY MODE
07/24/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/758,053	REYNOLDS ET AL.	
	Examiner	Art Unit	
	JEFFREY R. WEST	2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 March 2008*.

2a)☐ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5 and 9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☒ Claim(s) *1-5 and 9* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 March 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Allowable Subject Matter

2. This application is in condition for allowance except for the following formal matters:

Claims 1-5 and 9 are objected to because of the following informalities:

In claim 1, line 3, to avoid problems of antecedent basis, "each packet" should be ---each intercepted packet---.

In claim 1, line 22, to avoid problems of antecedent basis, "said stored packet" should be ---said each stored packet---.

In claim 2, line 5, to avoid problems of antecedent basis, "said consecutive jitter" should be ---said consecutive positive jitter---.

In claim 3, line 5, to avoid problems of antecedent basis, "said consecutive jitter" should be ---said consecutive positive jitter---.

In claim 4, line 5, to avoid problems of antecedent basis, "said maximum values" should be ---said plurality of maximum values---.

In claim 5, line 5, to avoid problems of antecedent basis, "said variance values" should be ---said plurality of variance values---.

In claim 9, line 4, to avoid problems of antecedent basis, "each packet" should be ---each intercepted packet---.

In claim 9, lines 23-24, to avoid problems of antecedent basis, "said stored packet" should be ---said each stored packet---.

3. Except for the aforementioned formal matters, claims 1-5 and 9 are considered to be allowable over the cited prior art for the following reasons:

Cisco Systems, "Evaluate Network Performance with Cisco IOS® Service Assurance Agent" discloses a method of assessing speech quality transmitted via a packet based telecommunications network (i.e. voice over IP) (page 66) comprising the steps of storing a sequence of intercepted packets associated with a call (i.e. VoIP call) (page 70), each packet containing speech data (i.e. voice) (pages 8 and 66), and an indication of a transmission time of said packet (i.e. STx) (page 65); storing with each intercepted packet an indication of an intercept time of said packet (i.e. RTx) (page 65); extracting a set of parameters from said sequence of packets wherein the extracting step comprises the sub steps of generating a jitter parameter (i.e. JitterSD) for each of a sequence of stored packets in dependence upon the difference between the transmission time of a stored packet (i.e. ST2) and the

transmission time of a preceding stored packet of the sequence (i.e. ST1); and the difference between the intercept time of said stored packet (i.e. RT2) and the intercept time of said preceding packet (RT1) (page 65); and generating a positive jitter parameter (i.e. NumOfPositivesSD) for said stored packet in dependence upon the polarity of said jitter parameter for said stored packet and the polarity of said jitter parameter for preceding stored packets wherein the positive jitter parameter defines the number of preceding stored packets for which a polarity of the jitter parameter is positive (pages 66 and 72).

Magalhaes et al., "Transport Level Mechanisms for Bandwidth Aggregation on Mobile Hosts" teaches transport level mechanisms for bandwidth aggregation on mobile hosts comprising means for determining a consecutive positive jitter parameter that is based on the consecutive positive jitter of packets which have been received consecutively (pages 167-168, "Bandwidth estimation", lines 1-37).

U.S. Patent Application Publication No. 2003/0086425 to Bearden et al. teaches network traffic generation and monitoring systems and methods for their use in testing frameworks for determining suitability of a network for target applications, such as VoIP network applications (0006, lines 1-10), comprising means for extracting a set of speech quality parameters, including jitter, determining an estimated mean opinion score in dependence upon the set of speech quality parameters (0085, lines 1-13) and storing the estimated mean opinion score on a computer-readable medium accessible by a user for visualization and analysis (0259, lines 1-19).

U.S. Patent No. 6,665,317 to Scott teaches a method, system, and computer program for managing jitter as part of a VoIP system (column 1, lines 21-33) employing packet communication (column 4, lines 40-52) in order to determine jitter as a traffic statistic of time-stamped packets (column 3, lines 38-50) wherein the traffic statistic is determined by counting a number of packets having a monitored traffic value and returning the count to zero upon receipt of a packet having a non-monitored value (column 6, line 65 to column 7, line 4).

U.S. Patent Application Publication No. 2003/0018450 to Carley teaches a system and method for providing composite variance analysis for network operation of a packet based network (0002, lines 1-9 and 0017, line 1 to 0024, line 3) comprising means for extracting and storing a jitter parameter performance metric for a sequence of packets (0041, lines 1-23) determining a variance statistic for the performance metric and determining a subsequent standard deviation of the determined variance statistic (0047, line 4 to 0048, line 7), wherein the variance statistic includes a plurality of maximum values and standard deviations of sub-sequences of the performance metric (0068, lines 11-19). Therefore, Carley teaches determining both a maximum of the performance metric followed by a standard deviation of the maximum as well as a standard deviation of the performance metric followed by a subsequent standard deviation. It is further considered inherent that in order to determine each standard deviation, an average and variance must first be determined.

As noted above, the cited prior art teaches many of the features of the claimed invention and while the invention of Magalhaes does teach determining a consecutive positive jitter parameter that is based on the consecutive positive jitter of packets which have been received consecutively, the consecutive positive jitter of Magalhaes is an overall long-term jitter measurement value and not a parameter generated for each stored packet that defines the number of immediately preceding stored packets which have been received consecutively. Additionally, while the invention of Bearden et al. does teach means for extracting a set of speech quality parameters, including jitter, and generating an estimated mean opinion score in dependence upon the set of speech quality parameters (0085, lines 1-13), Bearden does not explicitly teach generating an estimated mean opinion score in dependence upon the set of parameters determined in claims 1 and 9.

Therefore, the cited prior art does not teach or suggest, in combination with the other claimed limitations for a method of/apparatus for assessing speech quality transmitted via a packet based telecommunications network, generating an estimated mean opinion score in dependence upon an extracted set of parameters wherein the extracting includes generating a jitter parameter for each packet of a sequence of stored packets in dependence upon a difference between the transmission time of a stored packet and the transmission time of a preceding stored packet of the sequence and a difference between the intercept time of said stored packet and the intercept time of said preceding stored packet; and generating a consecutive positive jitter parameter for said each stored packet in dependence

upon a polarity of said jitter parameter for said stored packet and a polarity of said jitter parameter for immediately preceding stored packets wherein the consecutive positive jitter parameter defines the number of immediately preceding stored packets which have been received consecutively, for each of which a polarity of the jitter parameter is positive, wherein said consecutive positive jitter parameter is returned to a value of zero upon receipt of a packet having a non-positive jitter value.

4. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

Conclusion

5. Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 25 USPQ 74, 453 O.G. 213, (Comm'r Pat. 1935).

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY R. WEST whose telephone number is (571)272-2226. The examiner can normally be reached on Monday through Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eliseo Ramos-Feliciano can be reached on (571)272-7925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeffrey R. West/
Primary Examiner, Art Unit 2857

July 24, 2008